

REMARKS

This communication is in response to the final Office Action dated June 1, 2010. Claims 1, 2, 11, 12, 19, 25, 26, 29, 36, 37, 40, 76-83, 86-94, 97-102, and 105-112 are pending, where claims 3-10, 13-18, 20-24, 17, 28, 30-35, 38, 39, 41-75, 84, 85, 95, 96, 103, and 104 were previously canceled. By this communication, claims 1, 19, and 29 are amended and claims 105-112 added. Support for the amended subject matter can be found, for example, in Fig. 2 and at page 10, line 25 through page 11, line 24 of the original disclosure.

On page 14 of the Office Action, the Examiner raises a question of Applicants' "good faith in dealing with the Office" based on arguments presented in the previous response. Applicants respectfully submit that any previous arguments were submitted in good faith and without any intent to deceive or defraud the Office.

In numbered paragraph 1 on page 2 of the Office Action, claims 1, 2, 11, 12, 19, 25, 26, 29, 36, 37, 40, 76-83, 86-94, and 97-102 stand rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. Applicants respectfully traverse this rejection. However, in an effort to expedite prosecution claims 1, 19, and 29 are amended to address the Examiner's concerns.

In numbered paragraph 2 on page 4 of the Office Action, claims 1, 2, 11, 12, 19, 25, 26, 29, 36, 37, 40, 76-83, 86-88, 90-94, and 97-102 stand rejected under 35 U.S.C. §103(a) for alleged unpatentability over *Dent* (U.S. Patent No. 5,619,503) in view of *Kumar* (U.S. Patent No. 5,793,253) and further in view of *Fenter* (U.S. Patent No. 4,459,651). Applicants respectfully traverse this rejection.

In Figures 1-6, Applicants' describe exemplary embodiments of a transceiver 100 that includes means for modulating and demodulating information signals. The modulating means includes a data input means, a data processing means 104, and a power output means 106. The power output means 106 supplies a signal to a first 90° hybrid 134, such as a branchline coupler. Outputs from the hybrid 134 are supplied to amplifiers 140 and 142, which output amplified signals to second and third 90° hybrids 144 and 146. Hybrids 144 and 146, for example, are arranged in tandem to permit the use of a plurality of separate, parallel stages, or channels, of amplification (e.g., page 8, lines 7 and 8; Fig. 1). The transmitter also includes a regulator 200 that supplies power to the components of the transceiver. The regulator includes a positive voltage regulator circuit and a negative voltage regulator circuit. The positive voltage regulator circuit produces a drain bias voltage 246. The negative voltage regulator circuit produces a negative gate bias voltage 274. The positive and negative voltage regulator circuits are connected such that the voltage output of the positive voltage regulator circuit is inhibited when the negative gate bias voltage 274 produced by the negative voltage regulator circuit is not sufficiently negative by being above a predetermined threshold.

Applicants' have amended claims 1, 19, and 29 to embody the foregoing features. In particular, independent claim 1 recites, among other features,

regulator means having at least one DC voltage regulator for providing at least two DC output voltages, wherein one of the at least two DC output voltages is a negative voltage; and
means for inhibiting a first of said two DC voltage outputs when the negative voltage of said at least two DC output voltages is above a predetermined threshold.

Independent claim 19 is directed to a method and recites, in part,

providing a positive regulated DC output voltage and a negative regulated DC output voltage to the modulator and demodulator; and

inhibiting an output of said positive regulated DC output voltage when said negative regulated DC output voltage is above a predetermined threshold.

Further, independent claim 29 embodies the above features by reciting in part,

at least one DC voltage regulator producing at least two DC voltage outputs, wherein the at least one DC voltage regulator includes a negative voltage regulator; and

a switch for inhibiting a first of said at least two DC voltage outputs when a second of said at least two DC voltage outputs from the negative voltage regulator is above a predetermined threshold.

The combination of *Dent*, *Kumar*, and *Fenter* fail to disclose or suggest every feature recited in Applicant's claims.

Beginning on page 7 of the Office Action, the Examiner concedes that the combination of *Dent* and *Kumar* fails to disclose or suggest regulating means and regulating an output voltage as is recited in the claims. *Fenter* is relied upon in an effort to remedy this deficiency.

Fenter discloses a switching power regulator power supply that converts AC voltages into DC voltages for computer and peripheral equipment. The device includes a voltage regulator circuit that produces an output voltage when a voltage at an input terminal is within a range of 4.5 to 5V. The power supply regulator outputs +24 VDC and +5 VDC supply voltages via secondary windings based on the 5V output of the regulator circuit. See Fenter, col. 6, lines 13-32. The output voltages are supplied to a load only if the +5VDC output voltage increases above a 5 VDC threshold. Rising above the threshold triggers an amplifier circuit to generate an

output error voltage, which causes a Timer circuit to stop generating output pulses. The Timer circuit generates the output pulses based on a 5 VDC input from the voltage regulator circuit. The pulses are provided to a primary winding, which is coupled to the two secondary windings, for generating the +24 VDC and +5 VDC output supply voltages.

Fenter, however, fails to disclose or suggest a voltage regulator that generates a negative output voltage. Nor does *Fenter* disclose inhibiting the output of a positive DC voltage when a negative DC voltage is above a predetermined threshold. As noted above, the negative DC voltage produced in Applicant's claimed embodiment is used as a gate bias voltage for the various components in the transceiver. That *Fenter* is directed to supplying power to computer and computer peripheral equipment, means there would be no reason to modify this circuit so that it outputs a negative DC voltage as recited in the claims.

In summary, *Dent*, *Kumar*, and *Fenter* when applied individually or collectively as suggested by the Examiner, fail to disclose or suggest every feature and/or the combination of features recited in Applicants' claims. As a result, the combination of references fails to establish a *prima facie* case of obviousness with respect to independent claims 1, 19, and 29 and their corresponding depending claims. Withdrawal of this rejection, therefore, is requested.

In numbered paragraph 3 on page 12 of the Office Action, claim 89 is rejected under 35 U.S.C. §103(a) for allegedly being unpatentable over *Dent* in view of *Kumar* and *Fenter* and further in view of *Bhame et al.* (U.S. Patent No. 5,911,117). Applicants respectfully traverse this rejection.

Because claim 89 depends from claim 1, Applicants respectfully submit that this claim is allowable for at least the reasons discussed above with respect to claim 1. Furthermore, this claim is deemed further distinguishable over the applied references based on the additional features recited therein. For at least these reasons, withdrawal of this rejection is respectfully requested.

Claims 105-112 are added. Each of these claims depend from one of claims 1, 19, and 29 where applicable. Based on the discussion above, Applicants believe that these new claims are allowable for at least the same reasons discussed above. Allowability stems from the combination of *Dent*, *Kumar*, and *Fenter* failing to disclose or suggest the generation of a voltage regulator that outputs two voltages one of which is a negative DC voltage. In addition, claims 105-112 are distinguishable over the applied art because of additional features recited therein that are neither taught nor suggested in the applied references. Favorable consideration of these claims is therefore respectfully requested.

Conclusion

Based on the foregoing amendments and remarks, claims 1, 2, 11, 12, 19, 25, 26, 29, 36, 37, 40, 76-83, 86-94, 97-102, and 105-112 are deemed allowable and this application is believed to be in condition for allowance. In the event any issues adverse to allowance remain, the Examiner is invited to contact the undersigned in an effort to advance prosecution.

Respectfully submitted,

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